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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,454	08/29/2003	Masahiro Kato	B-5226 621227-3	8752

36716 7590 06/21/2006

LADAS & PARRY
5670 WILSHIRE BOULEVARD, SUITE 2100
LOS ANGELES, CA 90036-5679

EXAMINER	
GOMA, TAWFIK A	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/651,454	KATO ET AL.	
	Examiner	Art Unit	
	Tawfik Goma	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1 and 6-9 is/are rejected.

7)☒ Claim(s) 2-5 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the amendment filed on 4/18/206.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yanagawa et al (US Patent Publication 2002/0067672).

Regarding claim 1, Yanagawa discloses a tilt correcting apparatus for correcting a tilt amount of a light beam to be radiated from a pickup to a disk (fig. 1), the apparatus comprising: a pre-pit signal producer configured to produce a pre-pit signal indicative of an existence/nonexistence of a pre-pit formed on the disk on the basis of returned light of the light beam radiated onto the disk (52, fig. 1 and S13, fig. 18); an RF signal producer configured to produced an RF signal from bits of information recorded on the disk on the basis of the returned light (par. 49 and 37, fig. 14); a correcting-amount deciding unit configured to decide an optimum tilt-correcting amount by measuring an offset amount on the basis of a relationship between the pre-pit signal and the RF signal (1, 88, fig. 16 and S8, fig. 17) and making use of the measured offset amount (28, fig. 16); and a tilt corrector configured to correct the tilt amount on the basis of the optimum tilt-correcting amount (13, fig. 16).

Regarding claim 6, Yanagawa further discloses wherein the correcting-amount deciding unit further comprises a correction profile producing device configured to allow the optimum tilt-correcting amount to be obtained at each correcting reference position determined previously on the disk and configured to produce a correction profile consisting of the optimum tilt-correcting amount at each correcting reference position (S21, fig. 20); and wherein the tilt corrector is configured to correct the tilt amount on the basis of the correction profile (S25, fig. 20).

Regarding claim 7, Yanagawa further discloses a disk rotation controller configured to make the disk rotate, the disk rotation controller configured to make the disk rotate at a constant angular velocity in cases where the correcting-amount deciding unit obtains the optimum tilt-correcting amount at each correcting reference position (par. 67).

Regarding claim 8, Yanagawa further discloses a memory configured to memorize the optimum tilt-correcting amount obtained at each of a plurality of radial positions of the disk (71, fig. 14 and S26 fig. 20).

Method claim 9 is drawn to the method of using the corresponding apparatus claimed in claim 1. Therefore method claim 1 corresponds to apparatus claim 1 and is rejected for the same reasons of anticipation as used above.

Allowable Subject Matter

Claim Objections

Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-5 are allowable over the prior art of record because the prior art of record including closest references Yanagawa (U.S. Patent Publication 2002/0067672) and Kunimatsu (US Patent Publication 2002/0114237), considered in combination or individually, fail to suggest or fairly teach a tilt correction apparatus including a combination of a first tilt detector based on an RF signal amplitude and a second tilt detector based on a prepit signal amplitude in which the tilt correction is based on a difference between the two tilt detection amounts.

Response to Arguments

Applicant's arguments filed 4/18/2006 have been fully considered but they are not persuasive. Regarding applicant's argument that Yanagawa fails to disclose "a correcting-amount deciding unit configured to decide an optimum tilt-correcting amount by measuring an offset amount on the basis of a relationship between the pre-pit signal and the RF signal," applicant's arguments are not persuasive because Yanagawa discloses a selector (88, fig. 16) and a system control circuit (1, fig. 14), (which read on claimed deciding unit), that decide an optimum tilt-correcting amount that is calculated using the RF signal (see fig. 14) by selecting one of the first or second tilt adjustment signals (75, 80, fig. 14 and S8, fig. 17) based on the presence of an LPP signal in a

push-pull signal (see S8, fig. 17). By determining the type of disk using the LPP signal, the deciding unit decides which offset amount is used for tilt adjustment, and hence the measured offset amount that is applied to the correction unit is based on a relationship of both the LPP and RF signals. The offset amount is based on a relationship between the type of disk, which is established using the LPP signal, and the RF signal used during the tilt offset calculations of the first through third tilt calculating units.

Regarding applicant's arguments that the ROM units do not receive a push pull signal since it is canceled to leave only the DC component, applicant's arguments are not persuasive as Yanagawa discloses that the push-pull signal is canceled only to provide a reference signal which is used later during recording. During the recording process, the push pull signal is compared with the reference signal to establish the first tilt error signal (see par. 57 lines 14-21 and par. 58). Furthermore, applicant's argument is moot since the push-pull signal that applicant cites is not relied upon by the examiner to establish the relationship between the LPP signal and the RF signal in measuring the tilt offset amount (see previous argument).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T. Goma
6/14/2006

THANG V. TRAN
PRIMARY EXAMINER